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## SOME MARGINAL NOTES ON POLARITY AND NEGATION

## 1.0

The study of negation and polarity has gained importance in linguistics since the middle of this century. The reason why this is so can perhaps be sought in the problems that such a study raises in various parts of linguistic theory: syntax, logic, semantics, discourse analysis. Trying to cope with the vast amount of what has been written on negation, one cannot help being confused. Negation represents different things for different observers. It is a justified impression that we are nowadays farther from a unified theory of negation than ever before, having to cope with inadequate generalizations or overgeneralizations. Even such a non-assuming notion as "negative sentence", as we shall see, is not an object of a general consensus.

As an example of overgeneralization, one could mention the famous Saussurean discovery that everything in language is negative, as there are only differences without positive terms. According to this view, negation is the very essence of language. But in such a case, surely this is all we can say about it. Nobody could seriously assume that a theory of negation could be erected on such foundations.

My aim in doing this research is to show that a universal analysis of negation in natural language can be provided only on its formal, i.e. syntactic, basis. Here, of course, we touch the issue whether syntax can be studied as an autonomous module or not. I realize how such autonomy is vulnerable from the position of practical experience but I also think that the issue has been somewhat misunderstood. Autonomous syntax need not be taken as a strict apriorism. It is hardly anything more than a reasonable requirement that, when it is investigated how linguistic structures interact with cognitive and social systems, somebody should take the time to look at those structures first.

This is the main point of my argument. In order to see the syntax of negation at all, we have to free our perspective from the contamination with semantic or pragmatic notions like antonymy, contrast, disapproval etc.

No doubt, there are links between the syntax and the semantics of a negative sentence but we should see how indirect and mediated these links are. When Jespersen (1917.43) could not find much difference between the sentences she isn't happy and she is unhappy, he probably meant their being close to synonymous. One could, of course, disregard the fact that the former opposes she is happy by means of contradiction, whereas the latter does it by means of contrary oppositeness, these are admittedly minor differences. The major difference, however, between the two sentences which should not escape our attention is that only the former is de facto negative in the syntactical sense. The negativity of the latter example is situated on the lexical level. There it becomes involved in the naming (referential) job. This could explain the tendency of all such lexical negatives to be given a contrarian reading. She is unhappy can be paraphrased She bears a certain quality which is named by the lexical item unhappy.

## 1.1

One example of unhelpful theorizing is to try to explain negation by invoking the category of asymmetric markedness [+/-]. Having a choice of positive/negative, which is the marked term and which is the unmarked one? At first, this seems to be a trivially easy decision: the marked one should be the negative term as it is indicated by an explicit presence of a negator. The positive form where no negator appears is therefore unmarked. We get the following counterintuitive result: negative [+], positive [-].

But on second thought, we can try to overrule our first verdict. Unmarked terms, as we know from elsewhere, usually convey a more inclusive meaning. So man could be used to stand for all humanity. Similarly, in the pair deep-shallow, the former is taken to represent the dimension as a whole. We would normally ask How deep is the pond? but only where the opposite has been mentioned How shallow is the pond?

Applying these thoughts to our negative/positive dichotomy, we could readily notice that the denying function of the negator is to detract from the information contained in the positive sentence. Consequently, it is the negative sentence which makes fewer claims about the described state of affairs and as such it should bear the unmarked meaning [-]. Compare (1) and (2):

- (1) It's seven o'clock.
- (2) It isn't seven o'clock.

Because of its vagueness, (2) has, at any moment of its utterance much greater chance of being true than (1). On the other hand, as a reply to What's the time?, (2) is odd because it does not give the information asked for. Should it then be given the marked status because of its oddness? It seems, we are back at square one. To see that the binary approach cannot cope with the problems posed by negation, look at one more example of the negative/positive opposition:

## (3) We have seen an accident.

- (4) We haven't seen an accident.
- (4) is not only vague, but downright ambiguous. It could be paraphrased as
  - a) What we have seen was not an accident.
  - b) (Thank God, during all our journey), we haven't seen a single accident.

In (4) we have to compute the possible interactions of the negator with existential quantifier present in the indefinite article. On the purely binary basis (marked/unmarked) such a result is difficult to explain.

The binarism in the approach towards negation has, it seems, very deep roots. In a different guise, it reappears even in discourse analysis. Those who study language as communication and thus regard utterances in their proper context see the differences between positive and negative sentences from a functional point of view. Givón (1978) shows that, as discourse moves, positives and negatives perform different speech acts even if they convey the same proposition. The distribution of negative sentences is said to be characterized by more constraints compared to corresponding positives. (See also Stubbs 1984, chapter 6.) Similarly, Allwood (1977) argues that negatives sentences, in order to become relevant, must meet more and stronger requirements than corresponding positive sentences (such as expectedness constraint).

Whereas positive sentences are neutrally informative, and suitable for topic initiations, their negative counterparts seem, on the whole, to be limited to responses, denials, corrections of false assumptions etc. This goes well with what we saw in (1) and (2).

A similar conclusion as the one in discourse analysis, has been taken in grammar (or lexicogrammar) by M. A. K. Halliday. He classifies polarity [positive/negative] as a binary system with an unmarked/marked term, respectively.

Elsewhere (Functional Grammar), Halliday goes beyond this basic view of polarity as dichotomy. Inspired by the idea of the role of gradability in natural language, he speculates that there are "intermediate degrees between yes and no: various kinds of indeterminacy that fall in between, like 'sometimes' or 'maybe'" (Halliday 1994.88).

Unfortunately, he doesn't say where on this scale of negative modality clauses like *Maybe he won't come* are to be found. Whether more towards the negative or the positive pole is anyone's guess.

On the whole, Halliday keeps the binary system of polar values [positive/negative]. In Halliday (1992) he mentions the statistics of textual occurrences of such systems as polarity. They are said to give a characteristic frequency pattern. They have a "skew" probability 9 to 1. For polarity this means that approximately only each tenth clause in a sample is going to be "negative". This in itself is quite a remarkable finding, no less interesting is, however, Halliday's explanation of this regularity. It is claimed that the possession of such non-equiprobable grammatical systems gives language a certain semiotic advantage. The 9 to 1 skewed-probability systems are less prone to being disrupted by noise than equiprobable systems.

I agree with Halliday that a quick recognition whether a given clause is negative or not is of great importance for whoever has to decode verbal messages. Sometimes a matter of life and death depends on such a recognition being correct in practical life.

What I regret, though, is the ease with which the simple existence of negative and positive clauses is taken for granted. I find it a bit frustrating that no instructions are given how clauses have been or can be assessed for such statistics. Automatic detection is hardly possible. For even if the number of occurring not and n't instances is easily obtained, we still do not know whether the clauses are really negative.

According to occurrences of not, a sentence like She can't not be there would be, for instance, counted twice and She will hardly be there not even once. More problems arise with other negators such as "n-words": no, nothing, never etc. We cannot simply take their presence in the sentence as an unambiguous indication of the negative status of that sentence (or clause). See, for instance, example (8a) below.

There is the added complication that the frequency of negative sentences will probably depend on the genre of discourse studied and its conventions. Leafing through April 7 1998 edition of The Guardian and focusing only on the headlines, I found not only a lower percentage of those containing a negator of any kind than predicted by 9 to 1 probability, but I also came across difficult cases like *Hamas feud*, not Israel, killed master bomber.

Here a contrastive not-phrase is parenthetically inserted into a positive clause. Do we have here two clauses, one of them positive, the other negative and elliptical? Or just one clause with the occurrence of not and so negative? Such decisions must be settled before any serious statistical counting can begin.

To return to our headline above, of course, it could be argued that any strong contrast (with nucleus accent on the contrastive item in spoken language) is a contrast in polarity and so akin to a negative utterance present at least implicitly. But such argumentation would make it impossible to take negation as a syntactic phenomenon.

One last difficulty in counting negativity in a text could be demonstrated on the following invented example: To answer an interrogator's question *Did he stay?* by *He left* is formally positive but conversationally equivalent to the negative reply: *No, he didn't*. This is OK if only the form is measured. But take *No, he left*. Shall we take the sentence equivalent *No* as a negative clause on its own, which is what Halliday suggests (1994.92)?

A special case of contrast is where the universe of discourse has only two possibilities. Using a negative or a positive wording in such a situation is informatively equivalent.

- (5) He didn't survived the crash.
- (6) He died in the crash.

## 2.0

In my paper, I will deal with how the challenge of negative sentences is taken up in the field of generative linguistics. I do not presuppose that the reader has any deeper familiarity with GB (government and binding approach). Therefore I will use their terminology only marginally. The restricted data which I will use in this part are drawn from Czech and English.

Several topics dominate the generativistic approach to negation: Negative polarity items (NPIs, which are known to English grammarians under the name of non-assertive items) and their licensing (Progovac 1994), the relation between NPIs and the focus of negation, transferring the negator to higher nodes (the so called Neg-raising), classification of languages according to negative concord (NC), n-words as negative quantifiers (in NC-languages like Czech they are supposed to be analogous to NPIs of non-NC-languages like English) etc. Under the derivational view (Pollock 1989, Laka 1990, Ouhalla 1990) the existence of a uniform syntactic category of Neg and its maximal projection (NegP) are assumed. From their syntactic interaction with other functional heads (such as IP, AgrSP, TP etc.) in the clause these authors try to explain some (if not all) of the properties of sentential negation like scope, even availability of rhetorical interpretations. The different surface realization, (by means of auxiliary verbs, adverb-like particles, or morphological affixation) are explained from the assumed underlying form.

# 2.1 What is a negative sentence?

The test for the negativity of a sentence presented by Jackendoff (1972) is based on an intuitive paraphrasis: A sentence [X - neg - Y] is an instance of sentence negation if there exists a paraphrase (disregarding presuppositions) It is not so that [X - Y]. The negative operator is extracted from the sentence and then put in front of it from where it denies the whole of the proposition. In the same way, negation is treated in formal logic (see section 2.2). According to Jackendoff, the presence of an explicitly negative element inside the sentence seems to be a necessary condition of a negative sentence. When we confront the paraphrasing approach with some empirical tests for negative sentences widely-recognized among linguists (Quirk et al. 1985) such as the reversed-polarity of the question tag (is it? isn't it?), we realize that the presence of an explicitly negative element in the sentence is not a necessary condition of negativity.

(7) He was hardly audible, was he? \*He was hardly audible, wasn't he?

The polarity of the question-tag is only one of the tests for sentence negation used by Klima (1964). The others are: either-conjoining, the negative appositive tag not even, and the neither-tag. From (8), however, we can see that the presence of a negative element in the sentence is not even a sufficient condition.

(8a) With no job I could be quite happy.

## (8b) Bez zaměstnání bych byl zcela spokojen.

Therefore, it should be noted that under some circumstances, a negator does not negativize the sentence. In order to negativize it, it must be in such a position that it can act as a sentential operator. This finding allows me to venture the following definition.

# Def. 1: Negative sentences (clauses) have a negative feature [+ neg] accessible to syntax

By syntax in Def. 1, I mean the rules by which the mental computation process correlates the individual parts (lexical items) of some syntactic object. This often has the consequence that the parts being correlated must undergo certain (overt or covert) operations (movements, modifications). The idea of correlating (or bringing into mutual relations) the units that have been taken from the Lexicon is, of course, nothing new It was very clearly formulated by Mathesius (1975). Describing the second stage of utterance encoding, he uses the following formulation: "After the elements capable of being denominated have been selected, they must be brought into mutual relations in the act of sentence formation" (Mathesius 1975.16, translated from Czech by L. Dušková).

Mathesius here anticipates the minimalist teaching of the present generativism. Here, for comparison, are the words written by Chomsky more than a sixty years after Mathesius: "Another standard is that language consists of two components: a lexicon and a computational system. The lexicon specifies the items that enter into the computational system, with their idiosyncratic properties. The computational system uses these elements to generate derivations and structural descriptions" (Chomsky 1995.168-169).

## 2.2 What is not a negative sentence?

Def. 1 has certain undeniable benefits. One benefit is that it predicts that all negative expressions must have some syntactic effect on the rest of the sentence. This effect can be most succinctly described as making the containing expression negative in its own right, i.e. delegating the feature [+ neg] to the higher node. If a negative particle has no such syntactic effect, then we are justified in concluding that the given sentence is not negative. Another advantage of Def. 1 is that it correctly denies the status of negative expression to items such as miss (chybět, postrádat), forget (zapomenout) which are often claimed to be negative in their lexico-semantic definitions. Note that forget is generally defined as not to keep in memory. Thus [+ neg] is covertly (or potentially) present in its semantic representation. But this is not sufficient for syntactic rules to "see" it. Consequently the lexical [+ neg] cannot negate the clause in which it occurs. This has, among others, the result that in (9a) the NPI (negative polarity item) anything is ungrammatical. The same effect is evidenced in the corresponding Czech sentence. Here něco (something) is a PPI (positive polarity

item) and *nic* (nothing) a negative quantifier behaving analogously to the English NPI (see Progovac 1994).

- (9a) He forgot to do something/\*anything
- (9b) Zapomněl něco/\*nic udělat.

We see that the definitional negatives (the term occurs in Jackendoff 1986) are unable to give their negative feature to their surrounding. This is, after all, predicted by the Lexicalist Hypothesis according to which syntax is not informed about the internal properties of words (see Chomsky 1970).

Lexicalist Hypothesis: The syntax neither manipulates nor has access to the internal form of words. (Quoted from Anderson 1992.)

Perhaps we might not mention words like forget, lack, miss in this connection at all for they are not explicitly negative. We could have easily opted for the stipulation that only explicit negatives stand any chance of being considered as potential candidates for sentential operators. The problem is that there are in English certain implicit negatives like hardly which trigger some syntactic effects such as inversion.

Def. 1 may, of course, seem too strong where it denies negativity to expressions which bear negative word-forming morphemes. Compare words with negative prefixes and suffixes such as unhappy, nešťastný, hopeless, beznadějný.

Obviously, the task of Def. 1 is to restrict negation to syntactically "visible" negation. This may, undoubtedly, go against the common-sense all-inclusive usage of the term "negative". One way how to avoid the appearance that the term "negation" is monopolized solely for the field of syntax would be to introduce one useful distinction. Let us specialize the term "negation" for the syntactic effects, but let us use the term "polarity" for the wider semantic phenomenon. Making this suggestion, I realize that "polarity" has been irreversibly incorporated into some terms like NPI, PPI (positive polarity items).

It might seem, at first, that the distinction could be simply reduced to the divide between syntax and morphology. In morphological (M-negation) a word is turned into its antonym according to the model (happy - unhappy). How defensible such a reduction would be is, of course, hard to say. On one hand, we know that the unmarked means of negating Czech clauses is to prepose the prefix ne- to the finite verb, which is clearly a morphological process (see 2.4).

- (10a) Rozumím tomu. Nerozumím tomu.
- (10b) I understand it. I do not understand it.

On the other hand, there are indisputable cases where the negative word is a morphologically free element (not a bound prefix) and still has not the force to negativize its clause (see also example 8a):

- (11) Not long ago we met at some/\*any party.
- (12) You will no doubt come, too/\*either.

In cases like (8a), (11), and (12) we must accept the conclusion that the negative elements—no, not—occurring in them have no syntactic effect on their clauses, which means rather surprisingly that they are non-accessible (non-visible) to syntactic processes.

## 2.3

As the first step towards a better understanding of examples like (11) and (12), it should remembered that a negator, be it a prefix or a free lexical item, is always incomplete, "non-saturated". By its grammatical function, it is a syncategorematic element. In other words, Neg cannot stand alone, for it cannot be interpreted in isolation from what it negates. Even the sentence equivalent No! must have its target.

Part of the job of decoding a negative structure consists basically in finding this target for the negator.

In my next study, I will explain what I see as the difference between target of negation and scope of negation. Notice that *not* and *no* in (11) and (12) are immediately (i. e. locally) decoded because its targets are in contact with them.

Now I would like to present a hypothesis.

# Hypothesis 1: All occurrences of explicit negation are syntax-accessible unless they are immobilized.

It remains to explain what I mean by the metaphor "immobilized". I coined it from a cognate term "mobility". In 20th century's linguistics, the notion of mobility has been given as one of the criteria of a full-status word (Bloomfield 1933). Restriction of the mobility gives a word a more or less diminished status. In literature, different kinds of mobility restrictions go under names such as condensation (Gabelenz 1901), collocation (Firth 1957) idiomatization leading to lexicalization (Bollinger 1981), and, last but not least grammaticalization (Lehmann 1995).

Now what can immobilize a negative element? Very loosely speaking, a negative element [Neg] is immobilized if it gets to a close vicinity of its target with which it forms a referential (naming) unit. So in (11) not stands directly in front of its target long. The whole job of negating is limited to this single element. In terms of decoding, this means that the decoder (whoever or whatever it is) can fully dispose of Neg the moment its local meaning "short time" has been found. Schematically: not long => short time. It should be noticed that not long is easily decodable as naming the antonym of "long". Once the antonym has been found, no more effects are to be expected.

With more space, it might be interesting to adduce more examples of immobilized negatives. When we compare them with their Czech equivalents, we often see that in Czech there is only one word: the combination has been lexicalized. Lexicalization is the next logical step after immobilization:

not far away — nedaleko (a particular place)

in no time — bleskurychle (a particular speedy way of some action)

For lack of space I leave open the question what factors facilitate or hinder the lexical incorporation of the negator in both languages.

## 2.4

We have already said that negative elements behave as grammatical formatives, not lexical items. This statement is not contradicted by historical evidence showing that present-day negative elements developed from lexical items or groups of lexical items, ne an wiht being the ultimate "ancestor" of not (Mathesius 1975.165). The process of grammaticalization as described by Lehmann (1995) is fully compatible with the notion of grammar of human language as a partially biologically dictated structure. One has only to assume a structure which, at each instantion, is realized by some convenient elements. Where exactly these elements are taken from is another dimension of the problem. Clearly, all grammatical formatives must once have been lexical items.

This notion of a grammatical formative can easily encompass the processes of renovation and innovation (Lehmann 1995). The eventual outcome of such processes should be charaterized by at least some of the following prototypical qualities:

- bondedness (agglutination, cliticization) unrestricted syntactic combinability;
- forming a part of a closed paradigm;
- obligatoriness;
- desemanticization.

How far do Czech and English negative elements meet these conditions? Let us look at the verbal negation in both languages.

Both fulfil the first two conditions: bondedness and closed paradigm.

Czech ne- is a genuine prefix that is combinable with virtually all infinitives and finite verb forms. A rare exception represents the verb nenávidět (hate) which does not take the Neg-prefix. As a result, (13) has no literal translation in Czech, (14a) being ill-formed.

- (13) Mary doesn't hate me.
- (14a) \*Marie mě nenenávidí.
- (14b) Není pravda, že by mě Marie nenáviděla.

Ne- is integrated into the phonological structure of the word as both elements form one prosodical unit, the prefix as the first syllable carrying predictably the word-stress.

In English, *not* is realized as a free word, but in informal speech it often becomes contracted to n't and clitically attached to the preceding auxiliary, with which it also moves to the initial position in questions.

As to the membership in a close paradigm, we can view the absence versus

presence of Neg as a paradigm sui generis. Of course, for reasons stated in section 1.1, I do not particularly like this solution.

The stumbling block seems to be obligatoriness. An example of an obligatory grammatical formative is the adnominal of. Of is fully predictable in a every context which is specifiable by a grammatical rule. In the case of of: two non-coreferential NPs standing next to each other and dominated by a common phrasal node. Neg does not seem to be obligatory in this sense. Speakers are free to make a sentence negative or not according to their communicative (extrasyntactic) needs.

This is the reason why negation is often modelled on categories whose obligatoriness consists in the necessity of choice: speakers must choose but their choice is free. It is usually forgotten that if the choice were really so free from the speaker's point of view, there would be no justification for regarding such a choice as grammatical system. Thus, Number is chosen freely at the Subject-NP, but depending on this choice, it is obligatory in the finite verb. Is there any configuration where Neg must be taken?

I can provide one such example from Czech. Note that the negative form of the Czech verb is fully predictable, if there is some other n-word (a negative quantifier) in the same clause:

(15) Pavlovi jsem \*(ne)dal nic.
To Pavel I-am ne-gave nothing.

As (15) shows, once the decision to use an overtly negative expression is taken, the syntactic consequences are inescapable.

As to the lack of semantics (desemanticization), I can only repeat my conviction expressed above that Neg (= not, ne-) does not possess any real-world meaning. In terms of Sapir's classification, negation is a PRC (Purely Relational Concept) (Sapir 1921). It has certainly a useful function to organize the way we talk but its meaning stays enclosed completely within language. This is in keeping with its grammatical status. But there are two exceptions:

- Negative quantifiers possess some extralinguistic meaning as they are morphologically complex structures, thus combining Neg and the range of arguments over which they operate.
  - nobody, nikdo = Neg + Person
- Although Neg has no extralinguistic meaning, it modifies the meaning of its target. Generally, it has a detracting or blocking effect. Part of this effect can be a recategorization of the proposition from EVENT to STATE. A Czech example (16a,b) brings this into evidence.
  - (16a) \*Ještě pořád přišel.
  - (16b) Ještě pořád nepřišel.

    Yet constantly he-came/ he-didn't-come

    (For all this time he has/n't/ come yet)

The temporal adverb pořád is incompatible with an EVENT-proposition.

A similar example is (17) where the perfective (Aspect) of the verb is incompatible with a period adverb, but the negated form of the perfective verb loses this incompatibility.

- (17a) Napsal dopis (\* dva roky). wrote-he letter two years
- (17b) Nenapsal dopis (dva roky).
  (He hasn't written a letter for two years)

One interesting case of negative/positive asymmetry in Czech is the perfective imperative form which when negated under normal conditions (i.e. ceteris paribus) must change into the imperfective Aspect.

- (18) *Skoč*. (Jump.)
- (19) Neskákej. (Don't jump.)

One last semantic modification brought about by the negation which has a grammatical reflex is documented by (14b) where the conditional Mood of the verb in the embedded clause is due to the negative in the matrix clause.

## 2.5

Has Neg got any canonical position or place in the clause?

In the present section, we shall look at sentential negation A, negative quantifiers B, and constituent negation C, in that order:

#### A

As far as the sentential (clausal, Jespersen's nexal) negation is concerned, there is a wide agreement that the negative element responsible for negating the whole clause must be in a position from where it can govern (c-command) that clause. Compare the "natural tendency to place the negative as early as possible" described by Jespersen (1917).

This position, in both Czech and English, happens to be pre-verbal (in English after the tensed auxiliary).

- (20a) The President will not resign
- (20b) President neodstoupí

The special position of the subject NP seems to allow it to escape the command by Neg. If we accept, however, that its location is [Spec, IP], the Specifier of the sentence. this has, for English, the consequence that in (21) the preverbal not cannot license the negative polarity item (NPI) anyone in Subject.

- (21) \*Anyone doesn't enjoy it
- (22) No one enjoys it. (Nikdo z toho nemá radost.)

Consequently, (21), with the meaning of (22), is ungrammatical. Alternatively, it could be given a denial reading if assisted by the nucleus on DOESN'T.

For instance, as a rebuttal to Anyone enjoys it. Then we would have to explain why the ungrammatical structure can become grammatical with a different distribution of stress. One possible way of explanation could be to postulate a Focus operator. As all operators (in order to be correctly interpreted) must move to the initial position Comp, Neg could take a free ride to Comp with the Focus operator. Notice that not all movements take place overtly in the actual word order. They can do it covertly, i.e. as an interpretational move at LF (logical form).

#### B

With respect to Negative quantifiers (NQs), it is a sufficiently well-known fact of Standard English that the occurrence of an NQ produces a negative clause even in absence of any further formal changes. This is in contrast to Czech where, as we have seen in (15), the presence of a NQ, triggers an automatic negation of the verb. Two questions arise:

- (a) By what syntactic mechanism is this done?
- (b) Why do the two languages differ?

In answering (a) we can again invoke a rule of QR (quantifier raising) which brings quantifiers to Comp of the sentence. From there, they c-command the whole clause including the verb which becomes automatically negative, too. In Czech, the raising move of quantifiers has sometimes a visible consequence in the word order, see (23). This is only a very brief introduction into the problem; the matter is in need of further research.

- (23a) I didn't sell anything. I sold nothing.
- (23b) Nic jsem neprodal.

Needless to say, in English, rule QR, being interpretive only, has no formal consequence and we can only assume that the movement takes place only covertly, i.e. at LF.

As seen from the example (23a), English has a parallel way of expressing the same meaning. See Bollinger (1977) on the situational differentiation of these two forms. His data and explanations are highly interesting, even if the frame he suggests for them (rightshifting) is in principle not acceptable to us.

Following data from Czech show that sometimes negative quantifiers can escape the raising rule and the syntactic computation. Either of two conditions must be fulfilled: (a) they must acquire a special lexical meaning which immobilizes their negator (24); or (b) they must be meant metalinguistically (25).

In (25), an authentic example, the speaker has been asked what he has written into the questionnaire space enquiring about (the number of) children. Notice that the inverted commas should indicate the metalinguistic character of the utterance.

(25) Já jsem tam napsal "žádné".

I aux. there wrote none

Under this metalinguistic condition, the raising movement of žádné is ill-formed whereas in the quantified meaning both moved (27) and unmoved version (28) are grammatical.

- (26) \*Já jsem tam "žádné" napsal.
- (27) Já jsem tam nenapsal žádné
- (28) Já jsem tam žádné nenapsal.

C

All clausal constituents can be negated as focused elements preposed by not.

- (29) I need not ADVICE \*(but MONEY). Potřebuju nikoli (ne) radu, nýbrž peníze.
- (29) is actually a correction of some previous explicit statement or of its implicit equivalent. One element is denied and replaced by a new element. Without this replacement by means of the *but*-phrase, (29) can be considered only marginally acceptable. Clearly, even with the replacement, (29) sounds rather awkward as an English utterance and could probably be improved by reformulation as a pseudo-cleft (30):
  - (30) What I need is not advice but money.

Constituent Neg is always preposed to the maximal projection of the given phrase and appears on its left. Therefore it has a dislocated, external, position. We cannot assume that it occupies [Spec, XP] as that position is already filled as we can see from the following examples.

- (31) not [the [cheapest one]]
- (32) not [right [in the middle]]
- (33) not [that [he has offered any alternative]]

Example (33) shows that a whole clause can be treated as a constituent denied in the same way as NP, PP etc. If it seems doubtful to you that a VP could be denied by a preposed negator, then think of infinitives or the following example.

(34) She BOILED the potatoes, not BAKED them.

In this constituent-denying function, *not* is always coupled with contrastive stress which bears the nucleus accent of the sentence. Even if exceptionally a pair of constituents can be contrasted to another pair, constituent-*not* can occurs maximally once.

- (35) ?? Not MARY bought us FRUIT, but JANE ICECREAM.
- (36) \*Not PETER needs not ADVICE, but JOHN MONEY.

Czech behaves here analogically.

## 2.6

Syntax of negation could probably motivated psycholinguistically. It could be assumed that human language users must have some independent syntactic means of telling or signalling a negative sentence from a non-negative one. "Independent syntactic means" are procedures based on grammatical formatives and their combination but not on concrete lexical meanings.

But even if the hypothesis that grammar forms an autonomous level of language processing turns out to be false (for all we know, it may be unprovable just because native speakers are unable, in natural circumstances, to disregard word meanings) it still would have to be explained, among other things, e.g. how speakers know the respective correct form of the agreement response to (37) and (38).

- (37) I think I spared the feelings of everybody.

  Yes, you did. = agreement

  No, you didn't. = disagreement
- (38) I think I spared the feelings of nobody.

  No, you didn't. = agreement

  Yes, you did. = disagreement

Processing of natural language cannot be conceived without concurrent decoding of grammatical meanings, and the issue whether a given sentence is negative or positive is a part of it.

## Conclusion

I have attempted to hint at some possible answers to the problems connected with negative sentences in Czech and English. In this brief exposition, all I managed to do was to revisit some well-known topics.

Focusing on the syntax, I don't intend by any means to argue that negation is a solely syntactic phenomenon. But I am convinced that only a thorough study of its syntax can give us tools to understand many of its puzzling phenomena.

In the past, cross-linguistic studies of negation have often been done only from a semantic or logical points of view. The formally syntactic side of negation was seen as something belonging strictly to the study of a particular language. Only recently, several authors decided to look at some universal aspects of the syntax of negation: Haegemann (1995), Progovac (1994). I share their conviction that languages show strong similarities in the way they treat negative sentences and I hope that one day it will be possible to design a universal grammar of negation.

## **BIBLIOGRAPHY**

Allwood, Jens (1977). Logic in Linguistics (Cambridge: CUP).

Allwood, Jens (1977). "Negation and the strength of presuppositions", in Oesten Dahl, ed., Logic, Pragmatics and Grammar (Department of Linguistics, University of Goeteborg).

Bloomfield, Leonard (1948). Language (New York: Henry Holt and Company).

Bollinger, Dwight (1977). Meaning and Form (London: Longman).

Dölling, Johannes (1998). Natürlichsprachliche Negation und logische Negationsoperatoren, Linguistische Studien, Reihe A (Berlin: Akademie der Wissenschaften).

Firth, J. R. (1957). "Modes of Meaning", in *Papers in Linguistics 1934-1951* (Oxford University Press).

Chomsky, Noam (1995). The Minimalist Program (The MIT Press).

Chomsky, Noam (1970). "Remarks on nominalizations", in R. A. Jacobs and P. S. Rosenbaum, eds., Readings in English Transformational Grammar, 184-221 (Waltham, MA: Ginn).

Gabelentz, Georg von der (1901). Die Sprachwissenschaft. Ihre Aufgaben, Methoden und bisherigen Ergebnisse (Leipzig: Tauchnitz).

Givón, T. (1978). "Negation in language: pragmatics, function, ontology", in Syntax and Semantics, vol. 9 (New York: Academic Press).

Haegeman, Liliane (1995). The syntax of negation (Cambridge: CUP).

Halliday, M. A. K. (1994). Introduction to Functional Grammar (London: Edward Arnold).

Halliday, M. A. K. (1992). "Language as system and language as instance", in *Directions in Corpus Linguistics*, Proceeding of Nobel Symposium, August 1981, Stockholm.

Horn, Laurence R. (1989). A Natural History of Negation (Chicago: UCP).

Hudson, Richard (1986). Word Grammar (Oxford: Basil Blackwell).

Jackendoff, Ray (1985). Semantics and Cognition (The MIT Press).

Jackendoff, Ray (1972). Semantic Interpretation in Generative Grammar (The MIT Press).

Jespersen, Otto (1917). Negation in English and Other Languages (Copenhagen).

Klima, Edward S. (1964). "Negation in English", in Fodor and Katz, *The Structure of Language* (Englewood Cliffs: Prentice-Hall).

Lehmann, Christian (1995). Thoughts on Grammaticalization (München: Lincom).

Mathesius, Vilém (1975). A Functional Analysis of Present Day English on a General Linguistic Basis (Prague: Academia).

Poldauf, Ivan (1964). "Some Points on Negation in Colloquial English", in A Prague School Reader in Linguistics, compiled by Josef Vachek (Bloomington: Indiana University Press).

Progovac, Ljiljana (1994). Negative and Positive Polarity (Cambridge: CUP).

Sapir, Edward (1921). Language (New York: Harcourt, Brace and World).

Stubbs, Michael (1984). Discourse Analysis (Oxford: Basil Blackwell).